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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,661	08/19/2003	H.-Rudi Kroeker	040159-000000US	6425

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EXAMINER

KASTLER, SCOTT R

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/644,661

Applicant(s)

KROEKER ET AL.

Examiner

Scott Kastler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### ***Claim Objections***

Claims 9 and 10 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In the instant case, the above claims differ from the independent claim 5 only in the suggested use of the converter ( a general oxygen converter in claim 9 and an argon oxygen decarburization converter in claim 10). It has been well settled that the manner or method of use of an apparatus cannot be relied upon to fairly further limit claims to the apparatus itself. See MPEP 2114 and *In re Casey*, 152 USPQ 235.

### ***Double Patenting***

Applicant is advised that should claim 9 be found allowable, claim 10 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). In the instant case, the above claims differ only in the suggested use of the converter ( a general oxygen converter in claim 9 and an argon oxygen decarburization converter in claim 10). It has been well settled that the manner or method of use of an apparatus cannot be relied upon to fairly further limit claims to the apparatus itself. See MPEP 2114 and *In re Casey*, 152 USPQ 235.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kudinov et al.

Kudinov et al teaches a cooling system including a cooling plate (figure 1 for example) for use in metallurgical environments, including one or more cooling panels, each panel including a bracket (6) and threaded fasteners (mounting bolts, see col. 2 lines 41-43), with an inlet connected to a cooling supply and an outlet (4), where each cooling panel includes a network of conduits and is detachable for replacement and/or repair, thereby showing all properly limiting aspects of the above claims since the above claims are directed to the cooling system itself, intended to be placed on an oxygen converter in the area of the trunnion ring, rather than the combination of the converter with a trunnion ring and the cooling system. As stated above, it has been well settled that the manner or method of use of an apparatus cannot be relied upon to fairly further limit claims to the apparatus itself. See MPEP 2114 and *In re Casey*, 152 USPQ 235. In the instant case, since the panels of Kudinov et al could perform the recited function of the above claims (they could be placed on the trunnion ring of a converter if desired) the actual placement of manner of use of the instantly recited cooling system cannot be relied upon to further fairly distinguish the instant claims from Kudinov et al.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of the instant disclosure in view of Kudinov et al. The admitted prior art of the instant disclosure teaches, in paragraphs [0002]-[0004], that it was known in the art at the time the invention was made, to cool the trunnion rings of an oxygen based metallurgical converter meeting all requirements of the above claims except the use of one or more cooling panels placed on the trunnion ring between the ring and the converter body for cooling the trunnion ring. As applied to claims 1-4 above, Kudinov et al teaches improved cooling panels for cooling metallurgical vessels meeting all aspects of the instantly recited cooling panels. Because the admitted prior art of the instant disclosure teaches that it was known and desirable in the art at the time the invention was made to cool trunnion rings on their inner surfaces between the trunnion ring and the converter body of an oxygen converter, motivation to employ the improved cooling panel of Kudinov et al, which is taught to be suitable for the cooling of metallurgical vessels and furnaces in general, as the cooling system desired by the admitted prior art of the instant disclosure, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

***Response to Arguments***

Applicant's arguments filed on 6/16/2005 have been fully considered but they are not persuasive. Applicant's argument that Kudinov is not directed to a cooling panel for use on a trunnion ring and does not include a bracket is not persuasive. Firstly, as stated in the above rejection Kudinov does include a bracket (6) which could be employed in connection to a trunnion ring if desired. Secondly, as stated in Kudinov, at column 1, lines 5-10 for example, the cooling panel of Kudinov is intended for use in the metallurgical field of ferrous metallurgy in general, wherever cooling of components in a metallurgical environment would be desired, even though Kudinov may have particularly advantageous use in cooling furnace walls. It is well settled that a reference is not limited to its preferred embodiments in what the reference fairly teaches or suggests, see MPEP 2123. In any event, as stated above, at least with respect to instant claims 1-4, these claims are directed to the cooling panel itself, and the intended use of the cooling panel cannot alone, be relied upon to fairly further limit claims to the cooling panel itself.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after


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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Scott Kastler  
Primary Examiner  
Art Unit 1742

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